The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1.   A method of detecting a silent frame at a mobile station in a GSM transmission comprising:

(a)   receiving a data burst intended for said mobile station;

(b)   determining a signal-to-interference-and-noise ratio (SINR) for said data burst; and

(c)   if said SINR is below a predetermined threshold, then identifying said data burst as from a silent frame.

2.   The method of Claim 1, further including low pass filtering said SINR prior to comparing to said predetermined threshold.

3.   The method of Claim 2, wherein said low pass filter has a β of approximately 0.95.

4.   The method of Claim 1, wherein said predetermined threshold is less than 0.2.

5.   An apparatus for detecting a silent frame at a mobile station in a GSM transmission comprising:

(a)   means for receiving a data burst intended for said mobile station;

(b)   means for determining a signal-to-interference-and-noise ratio (SINR) for said data burst; and

(c)   means for determining if said SINR is below a predetermined threshold and then identifying said data burst as from a silent frame.

6.   The apparatus of Claim 5, further including a low pass filter that filters said SINR prior to comparing to said predetermined threshold.

7.   The apparatus of Claim 6 wherein said low pass filter has a β of approximately 0.95.

8.   The apparatus of Claim 5 wherein said predetermined threshold is less than 0.2.

9.   A method of detecting a silent frame at a mobile station in a GSM transmission comprising:

(a)   receiving a data burst intended for said mobile station;

(b)   determining a signal-to-interference-and-noise ratio (SINR) for

said data burst as:

$$SINR = \frac{SLa}{NLa} = \frac{\frac{1}{148}\sum_{k=1}^{148}|r(k)|^2}{\frac{1}{148}\sum_{k=1}^{148}|n(k)|^2}$$

; and

(c)   outputting a silent frame indication signal (SI) determined by

$$SI = \begin{cases} 1, & if \quad SINR < T \\ 0, & if \quad SINR \geq T \end{cases}$$

where if SI is 1, then identifying said data burst as from a silent frame.

10.   The method of Claim 9, wherein if SI is 0, then identifying said data

burst as a useful frame.